

CLIMATE RISK IN THE SEACOAST

Assessing Vulnerability of Municipal Assets and Resources to Climate Change

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Climate Risk in the Seacoast (C-RiSe): Assessing Vulnerability of Municipal Assets and Resources to Climate Change is a project that will provide Great Bay municipalities with maps and assessments of flood impacts to key assets and natural resources associated with projected increases in storm surge, sea level and precipitation. Estimated completion Spring 2017.

PARTNER ORGANIZATIONS

New Hampshire Department of Environmental Services Coastal Program

NH GRANIT

Rockingham Planning Commission

Strafford Regional Planning Commission

UNH Stormwater Center

CONTACT

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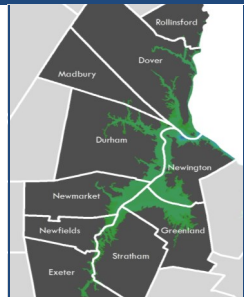
PROJECT COMPONENTS

SEA-LEVEL RISE AND STORM SURGE INUNDATION MAPPING

Water levels for sea-level rise (SLR) and sea-level rise combined with storm surge (SS) scenarios will be mapped for each municipality.

Scenarios

SLR	1.7 feet	4.0 feet	6.3 feet
SS	1.7 feet + SS	4.0 feet + SS	6.3 feet + SS



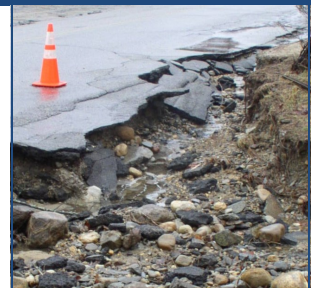
CULVERT ANALYSIS



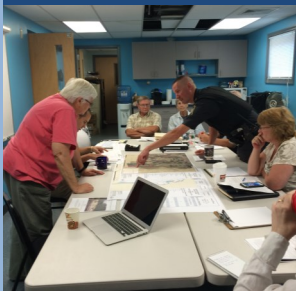
Modeling will be developed to assess culvert hydrology, hydraulic capacity, and aquatic organism passage at various flows under projected climatic conditions. Modeling results will enable municipalities to identify and categorize culverts for replacement that have inadequate flow capacity and/or present barriers to passage of aquatic organisms.

VULNERABILITY ASSESSMENTS

A vulnerability assessment that quantifies and maps impacts to transportation systems, critical facilities and infrastructure, and natural resources will be conducted for each municipality in order to provide a broad overview of the potential risk and vulnerability of municipal assets and resources resulting from projected increases in storm surge, sea level and precipitation.



HAZARD MITIGATION PLANNING



Outreach and technical assistance will be provided to each municipality in order to inform municipal leaders about future flood risks and incorporate vulnerability assessment results and adaptation strategies into local planning efforts. Municipal vulnerability assessment reports will be prepared for potential inclusion in local hazard mitigation plans.

